



Russel E. MacDonald

February 18, 1928 – February 20, 2017

Russel Earl MacDonald, 89, died on February 20 2017. Russ was an emeritus faculty in Biochemistry, having retired in 1986. Russ was born in MacDonald's Point, New Brunswick and earned B.A. and M.A. degrees from Acadia University and at Ph.D. from the University of Michigan.

In 1957, Russel joined Cornell University as an Assistant Professor of Bacteriology in the Department of Dairy and Food Sciences. He subsequently was promoted to Associate Professor with tenure in 1962 in the Department of Microbiology, and then moved to the Section of Biochemistry, Molecular and Cell Biology, in the old Division of Biological Sciences, where he was promoted to Full Professor in 1981.

During his graduate and professional career, Russell was awarded the Jane Coffin Childs Memorial Fund for Medical Research Foundation Fellow, the NASA-Ames Life sciences Faculty Research Fellow, and the H. Julian Allen Award for outstanding scientific paper (1978).

Russel's general research area was in microbiology and bacteriology. He was best known for his work with *Halobacterium halobium*, now known as *H. salinarum*. Originally categorized as a bacterium, *H. salinarum*, is taxonomically a member of the Archaea kingdom, which was only recognized as a separate kingdom in 1977. *H. salinarum* is an extremophile that grows in very high salt environments, thus making its physiology and biochemistry quite interesting in order to survive under such conditions. It is in this area that Russell published over a dozen papers, focusing on light-induced transport of amino acids and ions across the *H. salinarum* plasma membrane. Many of his papers were published in leading journals including *Science*, the *Proceedings of the National Academy of Sciences*, and the *Journal of Biological Chemistry*.

Russell loved all things science, gardening, cooking, poetry and plays, debating politics, travel and fighting the good fight. He is survived by three children, Andrew, Erik, and Jane MacDonald, granddaughters Annabel, Viola, and Marit, and numerous cousins.

Written by William Brown